



## Is there a European medical sociology?

Nicolas Henckes, Isabelle Baszanger

### ► To cite this version:

Nicolas Henckes, Isabelle Baszanger. Is there a European medical sociology?. Koniordos, Sokratis; Kyrtis, Alexandros. The Routledge International Handbook of European Sociology, 2014, 978-0415588805. hal-01273098

**HAL Id: hal-01273098**

**<https://hal.science/hal-01273098>**

Submitted on 11 Feb 2016

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

## Is there a European medical sociology?

Nicolas Henckes<sup>a</sup>, Isabelle Baszanger<sup>b</sup>

<sup>a</sup>. Chargé de Recherche CNRS  
CERMES3 – Centre de Recherche Médecine , Sciences, Santé, Santé mentale et  
Société - CNRS UMR8211 – INSERM U988 – EHESS – UPD  
7 rue Guy Môquet  
94801 Villejuif Cedex  
[henckes@vjf.cnrs.fr](mailto:henckes@vjf.cnrs.fr)

<sup>b</sup>. Directeur de Recherche CNRS  
CERMES3  
[baszange@vjf.cnrs.fr](mailto:baszange@vjf.cnrs.fr)

**Prepublication version of:** Henckes, N. et Baszanger, I., 2014, Is there a European Medical Sociology?, In: Koniordos, S. M., & Kyrtsis, A., eds., *The Routledge International Handbook of European Sociology*. New York and London, Routledge, pp. 196-210.

**Abstract** Is there a European sociology of health, illness and medicine – or, in short, a European medical sociology? While the answer to this question would certainly have been negative just a few years ago, this chapter argues that over the last thirty years a series of new analyses have emerged in the field which have laid the groundwork for a medical sociology at the European level. These examine how health issues are increasingly framed as consumer goods, public issues and existential concerns by a complex dynamics of global and local forces related to the globalization of scientific communication, the expansion of health markets and the wider circulation of individuals. The first part of the chapter discusses the institutional parameters that account for the development of medical sociology in the various European countries over the last fifty years. We then review the work conducted by European scholars regarding three major research issues present at the core of medical sociology throughout its history: the experience of illness and risk, the organization of medical work and the regulation of the production of biomedical entities.

**Keywords:** Medicine, sociology, history of the social sciences, European integration

Is there a European sociology of health, illness and medicine – or, in short, a European medical sociology? A survey of the field conducted just thirty years ago delivered a rather frustrating answer to this question. (Claus 1982) Not only was the sociological investigation of health, illness and medicine notably underdeveloped in Europe in comparison to the US, and in fact nonexistent in many European countries, but throughout the continent research was conducted in an uncoordinated manner. To the extent that there were sociologists interested in health issues in Europe, then one would have spoken of different European medical sociologies. However, the situation has significantly changed since that period. While wide variations remain in research practices across Europe, the sociological analysis of health, illness and medicine has significantly strengthened almost everywhere. Thanks to its strong commitment to empirical research while remaining engaged with major theoretical issues, medical sociology has developed into a distinctive way of doing sociology that has today gained strong recognition within both academic circles and medical, governmental and policy institutions. Even more significantly, over the last two decades, a series of new analyses have emerged in the field, which, we will argue, have also laid the groundwork for a medical sociology at the European level.

In many ways, the Europeanization of medical sociology reflects the wider Europeanization of European societies, if one understands the latter as a process of social construction situated at the confluence of increasing globalization and enduring local dynamics. (Beck and Grande 2007; Delanty and Rumford 2005) Indeed, the distinctive feature of health issues is the way in which they are framed at different levels as consumer goods, public issues and existential concerns. A universal preoccupation with health translates into specific concerns framed in cultural terms. Medicine is being standardized as a result of the development of guidelines that are enforced in international journals and organizations. However, medical practice remains local and situated by nature. Pharmaceutical corporations are global industries with local marketing strategies. And welfare states and health policies are rooted in strong national traditions but are subject to international pressures toward harmonization. Within the European area, health has not been integrated into Community action and health inequalities remain an important indicator of differences in well-being across the continent. However, medicine is at the center of numerous and important harmonizing efforts, which for instance have transformed Europe into a single market for patients or resulted in regulating pharmaceutical products at the European level (Steffen 2005).

European sociologists have been particularly successful in addressing these issues. Indeed, a distinctive recent contribution of European scholars to the sociological analysis of health, illness and medicine has been their critical attention to the complex ways in which medicine, health and illness contribute to the constitution of individuals as political subjects. The web of concepts and analyses developed by French philosopher and social scientist Michel Foucault around the idea of biopolitics and the analysis by British sociologist Anthony Giddens of the concern for the body as a central dimension of the reflexivity of post-industrial societies have proven influential well beyond the European area. In line with these analyses, sociologists from different traditions in Europe have joined in investigating the transformations in the regimes of production of health and medicine as examples of changing ways of governing societies at the confluence of globalizing and localizing trends. Concepts of biological citizenship (Petryna 2002), of politics of life itself (Rose 2007), of biomedicalization (Clarke et al. 2010), or of risk society (Beck 1986), have been proposed to account for new ways of intervening in health and illness that have emerged over the last thirty years, reflecting new ways of articulating science, public participation, corporate interests and the organization of healthcare at different levels (Clarke et al. 2010).

In this chapter, we reflect on this sociological experience in two different ways. We begin with a discussion of the institutional parameters that account for the development of medical sociology in the various European countries over the last fifty years. We examine both the configuration in which scholars engaged in medical sociology research in the 1960s and 1970s, and the ways in which this configuration was transformed over the last 30 years as a result of broad changes in both sociological research and the medical world. A characteristic of medical sociology has always been its rather uncomfortable position between the medical world and academic sociology. We then explore the ways in which these transformations have had an impact on three important research questions that have been at the core of medical sociology throughout its history, namely the experience of illness and risk, the organization of medical work and the regulation of the production of biomedical entities.

### **1. Foundations of medical sociology in Europe. 1950s-1980s**

Tracing the development of medical sociology in Europe is not an easy endeavor. From their onset in the post-war period, local traditions diverged with respect to the background, institutional affiliation, political agenda, empirical orientations, as well as theoretical commitments of researchers. While some developed rapidly into well established disciplines supported by strong associations, societies and/or journals, others remained more

modest. In some countries, medical sociology was introduced exclusively within medical institutions, while it gained a strong position within academic sociology departments in others. Some traditions were dominated by quantitative methodologies and remained close to social epidemiology, while others developed a distinctive style of micro-social studies relying on ethnography. These differences not only reflected differences in the development of the wider discipline of sociology but they were also consequences of the deep engagement of the subdiscipline with issues of health policy and practices as they were framed nationally. As a result, the various European medical sociologies were shaped both by the specific intellectual traditions and institutional contexts of sociological research, and by the distinctive organization of healthcare in the various European Countries. In many respects, medical sociology emerged as a scientific project that was national by nature, reflecting the national character of welfare states.

One strategy for characterizing these diverse European medical sociologies might be to examine how, as a whole, they differed from other traditions. In this regard, there is no doubt that some important conditions which presided over the development of medical sociology in the United States were not present in Europe. Among these was the early interest in issues of health and illness by major theoreticians such as Talcott Parsons, Robert Merton or Everett Hughes. Because sociology as a whole was also more firmly established within universities in the USA than it generally was in Europe, this interest helped in establishing these issues as legitimate research topics for academic sociology. Another distinctive feature of US medical sociology was the role played by psychiatry, which contributed both to setting a research agenda and to funding researchers through grants awarded by the National Institute of Mental Health. (Bloom 2002) As a result, early US medical sociology produced a number of ethnographic works interested in the ways in which concepts of identity and practice were shaped by the institutional context of medicine, and focusing more on mental illness and mental hospitals, than physical illness and general hospitals. These addressed diverse issues such as the “sick role”, the socialization of medical practitioners, the regulation of medical practice within organized medicine, or medical research. (Fox 1989; Freidson 1970)

In contrast, two important determining factors involved in the development of medical sociology in European countries were probably the strength of public health and the centralization of the welfare state. As a result, research in the field was also more policy-oriented and more closely tied to questions framed by the medical world. Many of the earlier themes developed by European medical sociologists reflected these trends: the impact of lifestyles on disease conditions and the social patterning of health and illness; the organization

of the health system and the delivery of healthcare; or attitudes toward illness and medicine among patients. However, the interpretation given to these problems varied widely in the various countries. (Claus 1982; Cockerham 2000)

Great Britain had the earliest tradition of sociological research on medical issues and its medical sociology community remains by far the most active in Europe today. One reason is probably its strong tradition of research in public health. Health was one of the three issues discussed at the first meeting of the British Sociological Association in 1953 and a medical sociology section was established in the late 1960s. (Annandale and Field 2009) By the late 1970s, British medical sociologists published two of the most widely read journals in the field at the international level: *Social science & medicine* and *Sociology of health and illness*. By the 1980s, most sociology departments had included medical sociology in their curriculum and medical sociology had become the largest section of the British sociological association.

German medical sociology followed a different trajectory. (Gerlinger 2006; Von Dem Knesebeck and Siegrist 2009) The distinctive characteristic of the subdiscipline in this country was the early incorporation of sociology into medical curricula in 1970. While medical sociology was virtually nonexistent before the 1970s, more than 80 courses were established in medical faculties as well as in some sociology departments by the mid 1970s. (Cockerham 2000) In 1972, two groups were created within and outside the German sociological association, while two journals were published for a few years in the 1970s and 1980s (*Medizinische Soziologie* and *Medizinsoziologie. Zeitschrift der Deutschen Gesellschaft für Medizinische Soziologie*). However, medical sociology found only limited support from German academic sociology and its institutional basis in medical faculties did not develop into a strong position.

France offered yet another profile. In this country, the belated development of medical sociology reflected the relative weakness of public health and more generally the lack of interest by the medical profession in social science analyses. Following some pioneering socioanthropological work (Bastide 1950), an interest in the sociology of medicine emerged in the 1970s as a consequence of several forces: in the late 1960s the French government established an agency to fund research in social science bearing upon social policies; and an interest also followed Michel Foucault's work on psychiatry. In 1983, the national institute of biomedical research – the INSERM – housed a unit in medical sociology and two years later, it created a larger multidisciplinary unit in collaboration with the national scientific research institute – the CNRS – which helped in maintaining a link with the larger discipline of sociology. In 1986 a multidisciplinary journal was also created - *Sciences Sociales et Santé*. In

Northern Europe, researchers in the field seem to have remained isolated until the 1980s. In Eastern Europe, the development of medical sociology depended on the openness of the communist regimes to sociology at large, an openness that was also determined by the existence of a pre-communist tradition. The most favorable configuration was to be found in Poland where an international meeting on the sociology of medicine was organized in 1973, which helped in establishing a community. (Ostrowska 1996)

Although with different configurations, toward the late 1970s in most European countries, medical sociology thus seemed to be moving toward institutionalization. Paradoxically, this was a time of growing unease within the field, leading to renewed questioning of its status between medicine and sociology. Several articles by founding figures expressed a concern that research in the field was too applied and lacked both a theoretical position and a firm political stance. (Freidson 1983; Horobin 1985; Illsley 1975) This concern was also reflected in the 1982 survey of medical sociology in Europe mentioned above, which emphasized the many weaknesses of the subdiscipline –its loose boundaries, its low level of institutionalization and strong relationship to medical schools or medical research institutions. (Claus 1982) In a way, these concerns had always been present in sociology at large, even before any medical sociology had formally been created, as shown by Emile Durkheim's effort to differentiate sociological from medical approaches to suicide. However, in the late 1970s the debate was related to a series of important transformations in both medicine and sociology which had a profound impact on their mutual relationship.

For one, in the 1970s, perspectives emphasizing conflict rather than consensus began to gain ground in medical sociology throughout the world. From a theoretical standpoint, this shift was first and foremost triggered by the growing influence of a symbolic interactionist perspective among researchers. Labeling theory stated that illness experiences were as much the product of the way medical institutions worked as that of the course of the disease. Medicalization theory accounted for the expansion of medicine by examining how the medical profession extended its jurisdiction over a series of problems that were not medical by nature. Other theoretical perspectives also added to these analyses. In France, Michel Foucault developed his analyses on medical power as an example of disciplinary power (Foucault 1975). In Great Britain, analyses inspired by science and technology studies stressed the constructed nature of medical knowledge (Barnes and Shapin 1979). However, some scholars feared these theoretical perspectives might support conservative political agendas aimed against redistributive policies, as they cast doubts on medicine. Most notably,

these concerns were expressed in a discussion on social constructionism published in *Sociology of health and illness* in the second half of the 1980s. (Bury 1986)

These theoretical perspectives also resonated with the emergence of a series of new social movements, both within and outside medicine, that challenged medical power and criticized the failure of welfare states to address the problems of a series of minority groups. Among those movements, feminism and antipsychiatry proved to be the most influential (Kline 2010; Staub 2011). These movements helped in placing health issues on the political and social agenda and they contributed to attracting a new generation of young scholars to the social study of medicine. In some cases – as with Foucault – political criticism was deeply enmeshed with theoretical production. However, at the same time, most Western countries witnessed the emergence of new neoliberal policies seeking to put a halt to the expansion of the welfare states. As these policies borrowed an anti-establishment rhetoric that was similar to critiques coming from the left, this also contributed to creating disquiet among social scientists.

## **2. Sociology and biomedicine in Europe 1980s-2000s**

In the 1980s and 1990s, at the same time that medical sociologists had to come to terms with these tensions, they also had to address the profound transformations brought about within medicine by the conjunction of accumulating technological innovations and sociopolitical transformations. Indeed few domains of social life in Europe have been transformed as much over these two decades as has medicine.

An influential characterization of these transformations is the observation that health rather than illness has become the focus of medicine in post-industrialized societies. (Rose 2001; Turner 2004) While traditionally, most medical interventions aimed at treating disorders, increasingly they now seek to enhance health in individuals who do not suffer from any ailment. As British sociologist Nikolas Rose put it, while medicine previously aimed at restoring the natural vital norm of the body, it now adds its own normativity to this norm. Medical interventions are more individualized and they also involve renewed forms of participation by targeted individuals and groups. Central to the new field of knowledge, practices and policies that constitute these interventions is the concept of risk, from genetic vulnerability to lifestyle, from environmental health to the management of chronic illness. More generally these transformations reflect a new critical engagement with uncertainty in contemporary Western societies both at the level of knowledge and policy production (Beck 1986; Callon, Lascoumes and Barthe 2001; Felt and Wynne 2007) and at the level of the very



construction of self identity. (Giddens 1991) But medical interventions are not only reconceptualized, they are also displayed in a series of new spaces that are no longer restricted within national boundaries. It is the exploration of these spaces, of their large-scale patterns as well as their local intricacies, that has constituted an impetus for more Europeanized, if not globalized, analyses of health, illness and medicine.

The first of these spaces is that of scientific exchange and communication. Its growing significance in the health field is a consequence of new arrangements between clinical practice and biological sciences in contemporary medicine, what is referred to by the term biomedicine. These changes resulted not only in transforming the nature of medical knowledge, which relies increasingly on statistical reasoning, but also in profound transformations in the way medical institutions are organized. Large-scale databanks or multicentric clinical trials are examples of the new sorts of organization that extend far beyond hospital walls. At the same time the miniaturization of biomedical innovations make possible their diffusion in wider networks.

The second space is related to the rise of new health markets as a result of both the privatization of healthcare and the growing role of manufactured objects and techniques in medicine. These transformations entail the development of a new industrial sector concerned with the production of these objects, including the rapidly growing field of biotechnology; the introduction of corporate interests and neo-managerial regulations in medical institutions; and the commodification of body tissue such as blood, genes, sperm, eggs or even organs. For patients, consumerism has emerged as a new way to frame their relationship with medicine, resulting in both new expectations toward health services and new conceptions of themselves and their bodies. The circulation of both patients and health professionals across the European continent is a major dimension of these transformations. Patients are seeking less expensive healthcare in countries with low wages; and as a consequence of free movement of workers in Europe, migrant health professionals form today an important contingent of the healthcare workforce in some countries, while others see their health professionals leaving for better positions elsewhere.

The third space results from the weakening boundaries between Europe and the rest of world. As a result, people, viruses, goods and technologies travel in increasingly global networks in ways that profoundly impact how they are conceived of in Europe. For instance, increasing population movement to, from and within the European continent has revived concern for epidemics, from HIV-AIDS to SRAS or H1N1 flu. Most of the recent medical crises that have affected Europe were the consequences of phenomena originating in other

parts of the world, including the reemergence of pathologies that seemed to have disappeared from this area, such as tuberculosis. Another noteworthy example is the way in which humanitarian action has reframed international relations. This has not only affected the relationships between European and non European countries, but also European societies themselves. For instance, the health of migrant populations has become a major concern for health systems in most European countries, throwing new light on the meaning of citizenship. The issue of access to treatment in the South, which has posed a major challenge to pharmaceutical companies based in Europe, might be cited as another example of the complex dynamic of transfer at the global level.

The response of sociology to the challenge posed by the analysis of these transformations has been twofold. For one, medicine and health have heightened interest in academic sociology. Following on Foucault, major theoreticians such as Ulrich Beck, Anthony Giddens or Zygmunt Bauman, have given the issues of health, illness and medicine a central role in their analysis of contemporary societies, acknowledging the way in which these issues have become crucial areas where social conflicts are played out. Ideas of biological citizenship or of politics of life itself have now gained a wide audience among sociologists. Aside from analysts of late or post-modernity, medicine, health and illness have also attracted the interest of scholars from other intellectual traditions within the social sciences. Science and technology studies became both a major source of inspiration and a strong contributor to the study of medicine, health and illness. (Casper and Berg 1995) Scholars from this field stimulated interest in technology (Blume 1992; Timmermans and Berg 2003b), the regulation of medical entities, or the negotiation of biomedical knowledge among a variety of actors. Other important contributions came from the sociology of the body (Featherstone, Hepworth and Turner 1991) or feminist studies. (Clarke 1983; Oakley 1984)

However, medical sociology itself has not been as successful as one might have expected in renewing its analyses. While the subdiscipline has undoubtedly expanded in most countries, this seems not to be the case in some, such as Germany. In most countries, much research is still of an applied nature and short-term. At the European level, the creation of the European Society for Health and Medical Sociology in 1983 has not fostered the creation of a more integrated community of researchers. These difficulties might be related to generational changes occurring in many countries after the departure of founding figures that dominated the field over the last thirty years. However, two new challenges face medical sociology in its development today. Firstly, in spite of the increasing circulation of researchers and of the globalization of its objects, medical sociology has remained organized within a national

framework. A recent review of British medical sociology has pointed to its parochialism (Annandale and Field 2009) and the same could probably be said of other national traditions as well. The second challenge might be even more difficult to tackle. It is linked to the development of reductionist thinking in medicine as a consequence of the scientific development we described above. As a result, medical sociology has to rethink its partnership with medicine in ways that can no longer rely solely on a shared concern for the social patterning of diseases. Indeed, there is a need to rethink the profoundly social nature of the forces that shape health, illness and medicine today.

In spite of these difficulties, in many ways, the situation of the subfield today could be characterized, borrowing Thomas Kuhn's terminology, as returning to normal science. In the last few years, several attempts to propose new syntheses of the sociological understanding of health, illness and medicine were published in the international literature. (Clarke et al. 2003; Rose 2007; Turner 2004) While these attempts might not be the last word on the issue, they indicate some of the pathways that medical sociology could take to keep up with transformations in the medical field. They also offer powerful tools to rethink concepts used by the subdiscipline in ways that would make possible the development of a European medical sociology. In the remainder of this chapter, we will try to illustrate a few of these analyses by reviewing some of the major research themes that have been developed by European scholars over the last fifty years.

### **3. Encountering the medical world: patients' experiences of health and illness**

Since the creation of the subdiscipline, the experience of illness and health has been of considerable interest to medical sociologists. While medicine has become a pervasive dimension in the daily lives of Europeans over the last fifty years, living with a chronic illness, a major disability or a life-threatening condition remains a difficult experience for those afflicted and their families. However, transformations in the delivery of healthcare have, in the meantime, profoundly affected the experience of being chronically ill, prompting new analyses from sociologists.

Classic research demonstrated the social and cultural patterning of the perception of illness and of health behavior. Work conducted in the United States with European immigrants showed that people coming from different cultures experienced pain differently. (Zola 1966) In Europe, interest in these issues derived at first from medicine's attempt at understanding the reason why patients did not comply with prescriptions or misuse services, but some of this early work was also related to more theoretically informed research, such as

Bourdieu's analyses of attitudes toward the body as reflecting a "habitus". (Boltanski 1971) Following on Talcott Parsons's analysis of the "sick role", this literature has produced an array of conceptual tools for addressing the concrete actions and expectations of individuals toward their own health, such as concepts of illness behavior (Mechanic and Volkart 1961; Young 2004), health behaviors (Blaxter 1990), health belief (Herzlich 1969) and more recently, risk beliefs and perceptions, health knowledge or lay expertise. A series of studies showed the patterning of these behaviors and beliefs according to class and ethnicity (Cornwell 1984), their homogeneity within the Western world (Lüschen and al. 1996), but also their limited impact on health outcomes when compared to factors such as life events. (Blaxter 1990)

Beginning in the 1970s, interest in these issues heightened as a result of the emergence of chronic illness as a public health problem in most Western states. While this move is usually attributed to a new awareness of the "epidemiological transition" in developed economies, that is the transition from the predominance of infectious diseases to that of degenerative diseases in aging populations, sociologists have insisted on transformations in medical and political thinking as being at the origin of this phenomenon. (Armstrong 1990) From a sociological viewpoint, chronic illnesses may be characterized by their duration as well as by their impact on all the dimensions of a person's life. Early research was influenced by U.S. interactionist perspectives and focused on the crisis in the social and personal identity of an individual as a consequence of the illness. (Bury 1982; Bury 1991) An influential methodological and theoretical approach to these issues was the analysis of the narratives of afflicted people. (Gerhardt 1986; Williams 1984) Sociologists investigated the coping strategies used in facing the uncertainties inherent in these conditions, the specific work needed in order to manage the disease (Baszanger 1986; Radley 1989) and, following on some of Erving Goffman's insights, the stigma attached to them. (Scambler and Hopkins 1986)

Over the last 20 years, the globalization processes that we described above have stimulated some fresh analyses on these issues. For one, reflecting the broad rise of individualism in western societies, changing regulations of medical work have produced a shift in the way the experience of health and illness is socialized in European societies. Among the many dimensions of this phenomenon is the new insistence on patients' autonomy put forth by both contemporary bioethics and by healthcare policies. This has led to insisting on the responsibility of patients in deciding and organizing their healthcare. This move is exemplified by programs promoting the role of informal carers or lay experts in healthcare

delivery in many countries. (Prior 2003) As a result, being ill and managing one's illness has increasingly become a matter of the resources available to individuals in facing their disease. The complexity of the medical system as well as the ever rising costs of medical care that are increasingly supported by patients make the encounter with the medical world a tough and costly experience. It also constitutes a major source of enduring inequalities between individuals, both within and between countries, an issue that remains a major research theme for medical sociologists. (Mackenbach 2006; Scambler 2012) In complex and ambivalent ways, the emergence of a movement toward "personalized medicine" that looks for treatments fitted to an individual genetic profile is another dimension of these transformations in the socialization of illness experiences which involve rethinking notions of the individual and the collective. (Hedgecoe 2004)

On the other hand, changes in the experience of health and illness have also been tied to the emergence and development of social movements organized around illnesses or health-related issues. Sociologists' interest in these movements was prompted by AIDS activism in the 1980s and 1990s but many of these movements have a much longer history, back to the emergence of social hygiene and disability movements in the first half of the 20<sup>th</sup> century. (Barral et al. 2000; Crossley 2006) More recently, these associations have played a role in advancing the cause of rare diseases and conditions underserved by medicine. Many of these groups are engaged in international exchanges and some have joined in creating organizations acting at the European level. These movements not only provide support to their members but they play an increasing role in shaping both health policies and biomedical research. (Rabeharisoa and Callon 1999) Sociologists have been specifically interested in how they contribute to normalizing the experience of illness, or how they reframe issues of hope at both the collective and the individual level. (Novas 2006)

#### **4. The organization of medical work**

While political science has been more concerned with the analysis of health systems, the contribution of medical sociologists to the understanding of healthcare delivery focused on the distinctive organization of medical work. Two main threads of analysis have classically dominated scholarship on this issue. The first was the self-regulation of the medical profession and the model it represented for thinking over the division of labor in other sectors of society. Perhaps because of the strength of the welfare state, this theme was not as strong in European sociology as it was in the US. However since the 1970s, a large body of research, relying on concepts of professionalization and medicalization, has examined issues of

professional identity and professional control (Aïach and Fassin 1994; Larkin 1980; Nettleton 1992) as well as the organization of the division of labor in the medical field between medical and paramedical professions. (Nancarrow and Borthwick 2005) While most of this work concentrated on national configurations, some comparative analyses demonstrated how the dynamics of specialization lead to different patterns of specialties reflecting diverse arrangements between the state, medical institutions, the medical profession, and the construction of public health problems in different countries. (Weisz 2006) Additionally, European scholarship paid special attention to the medical profession as a player in the governance of healthcare. (Johnson, Larkin and Saks 1995; Kuhlmann 2006) Drawing on Foucault's concept of governmentality or on neo-institutionalist theories, this line of research showed that governance is distributed among a series of actors involved in different arenas which all contribute to shaping health as both a public issue and a professional project.

In addition, the crisis of the medical profession since the 1970s has not been as strong in Europe as in the United States, where a dramatic increase of lawsuits against physicians as well as the rise of managed-care practices has created a highly constraining environment for medical workers. However, over the last twenty years a number of studies have pointed to the way medical authority has been challenged in Europe as well. Reforms of the welfare state entailed the rise of managerialism and the creation of internal markets within national health systems, thus raising the issue of a corporatization of healthcare work. This has been an especially important and enduring theme of research for British medical sociologists, who have devoted much effort to analyzing the series of reforms of the National Health Service and their consequences for medical work. (Gabe and Calnan 2009) In most countries, new regulations on medical work have been created in reference to the concept of Evidence-Based Medicine, with the involvement of new regulatory agencies or professional associations in the creation of guidelines or protocols. (Timmermans and Berg 2003a) Concepts of soft law or of instruments have been used to account for these regulations which have a normative content without being formally binding. (Lascoumes and Le Galès 2004; Tallacchini 2009) While much scholarship has been devoted to the question of whether this new regulatory framework undermines the professional autonomy of physicians or not, the way these regulations are understood and implemented locally should probably be more systematically examined.

The second important analytic theme of the sociology of medical work has been the specific texture of this work. Early studies explored the process of decision making, patient categorization by health professionals or patient-professional communication and conflicts. (Dingwall and Murray 1983; Jeffrey 1979) Most of these studies were conducted within

clinical services, but some also highlighted the ways in which administrative boards devised health policy decisions at both the local and the national level. (Hunter 1979) In the 1980s and 1990s, several lines of analyses were added to this work. First, sociologists paid more attention to the construction of operational knowledge in the clinic. (Atkinson 1995; Baszanger 1995; Berg 1992) Second, the new atmosphere of cost consciousness in the healthcare system helped put the issue of rationing on the sociological agenda. (Light and Hughes 2001) Finally, sociologists have also increasingly insisted on the gendering of medical work, drawing attention to dimensions of this work that are supposedly accomplished more by women, such as emotional work. (Bolton 2000; James 1992)

Over the last decade, there have been several incentives for moving these analyses beyond this level of micro analysis toward examining the new organizational arrangements in which medical work takes place and their impact on both professionals and patients. (Davies 2003; Saake and Vogd 2008) This may lead to the convergence of the two lines of inquiry described above. One aspect is the changing nature of medical organization as a result of the changes that have been described in the second section of this article. Beginning with the psychiatric hospital, the decline of the hospital has been a massive phenomenon in most European countries over the last fifty years. (Armstrong 1998) Decreasing numbers of hospital beds have been compensated for by the development of outpatient care, healthcare networks and formal collaboration between primary care practitioners and specialized services. Studies have also highlighted the emergence of new work collectives, for instance in cancer care, involving actors working in laboratories, biotech companies and the clinic. (Bourret et al. 2006) This is where comparative research at the European level is especially needed, as these new medical organizations sometimes extend well beyond national boundaries.

Several other important issues relevant to the sociological study of medical work have been less investigated by European medical sociologists. One of them concerns transformations in the training and socialization of health professionals. While this was a classic theme of North American medical sociology, European sociologists seem never to have devoted much research to this issue. (but see: Atkinson 1981; Baszanger 1985) There is a need for a better understanding of the changes brought about by changing attitudes of young doctors toward their work, especially as they may prove to be more open to international standards of clinical work. Related to this last issue is that of the consequences for healthcare delivery of the circulation of professionals mentioned above. In France for instance, as a result of restrictive *numerus clausus* policies and difficult working conditions in isolated

settings, rural regions fail to attract French practitioners and rely increasingly on foreign physicians: in one *département*, all the general practitioners who opened a practice in 2010 had obtained their medical diploma abroad. (Romestaing and Le Breton-Lerouvillois 2011) These trends raise the issues of the values brought into healthcare by these professionals but also the nature of their communication with patients and colleagues and participation in the local medical milieu.

## **5. The production and circulation of biomedical entities**

However, even more than in changing patients' experiences of health and illness or in the changing organization of medical work, an impetus for renewing medical sociology's analyses at the global and local levels has lain in a growing awareness of the role played within medicine by a series of biomedical entities that circulate widely in global networks. These entities may be living cells, body parts, molecules, drugs or technologies. In many ways, they might be seen as a third player between physicians and patients. The very existence of these entities and their availability to health practitioners and patients rely on the development of a new range of institutions and actors in order to produce them and to organize their circulation, factors which now also play a role in shaping the ways in which clinical work is organized. The globalized nature of many of these institutions and actors has been a determining factor for the globalization of medicine.

Early medical sociology gave little attention to these issues. Following pioneering work by US sociologist Renée Fox, a few European scholars examined the introduction of innovations such as dialysis or organ transplantation. (Halper 1989; Kutty 1994) They described the specific ethos of research clinicians involved in the development of these innovations and their ethical dilemmas in dealing with technologies that were expensive, relied on rare material and were, initially at least, dangerous. One major result of this research was to highlight the clinical regulation of practices within these teams. However, this research was isolated and medical sociology as a whole only marginally addressed the transformations brought about in the medical world by medical innovations. For instance, pharmaceuticals did not attract much attention from social scientists before the 1980s, which is puzzling given their growing role in segments of medicine that were under sharp sociological scrutiny, such as psychiatry (Henckes 2011), and given some early scandals that laid the groundwork for the creation of regulations of pharmaceuticals products, such as the Thalidomide case in the 1960s.



This began to change in the 1970s and more markedly in the 1980s and 1990s as a result of growing public concern about the safety, the cost and the ethics of medical technologies. One of the first issues to elicit public discussion was the regulation of pharmaceutical products. This resulted in the standardization of clinical trials and the creation in most European countries of a formal authorization procedure under state control. In the 1970s, a wider call for better evaluation of the safety and cost-effectiveness of health technology stimulated the development of Technology Assessment methodologies. As a result, in the 1980s and 1990s a series of new regulatory agencies were established in most European countries to supervise the marketing and utilization by healthcare workers of a large array of products. One area under sharp scrutiny was reproductive medicine. At the same time, in the 1990s the development of genetic engineering led to the emergence of a booming sector of biotechnology.

A major role is now taken at the European level in regulating the production and circulation of these entities, which are traded on markets that extend over the entire continent and sometime beyond, while several federal agencies have been created to harmonize and coordinate national policies. Among the latter is the European Medicines Agency, which centralizes authorizations to market drugs, or Eurotransplant, which is in charge of organizing the supply of organs. However, there is wide variation in how these regulations are implemented at the national and local levels. One reason is that these products are deeply endowed with cultural meanings, values and norms, which reflect the system of meanings, values and norms attached to the living body. This variation is demonstrated by the particularities found in organ donation systems (Hogle 1999) or the differing organization of genetic engineering in France and Britain. (Löwy and Gaudillière 2008) This is why analysis at the European level is particularly needed to account for the complex dynamics of both transnational and local patterning of practices.

In examining these issues, sociologists have been particularly sensitive to the status and the value of these entities. For instance, doing research with stem cells relies on complex arrangements that are necessary to ensure the safety and standardization of products, their viability on markets and the ethics and public acceptability of research. An example of these arrangements is to be found in the procedures that organize the transformation of donated embryos into material that can be used by researchers. (Franklin 2006) More generally, sociologists have analyzed biobanks, in which bodily materials are stored awaiting further use in research or in clinics, viewing them as complex institutions for governing life. (Gottweis and Petersen 2008) Following on the work of Italian philosopher Giorgio Agamben, concepts

of bare life have been proposed to account for the status of these living entities that are no longer meaningful life. (Agamben 1995)

Another concern relates to the increasing commodification of living entities, body parts or even whole bodies. This concern was originally raised in relationship to organ donation. Most systems are modeled on the concept of the gift and are supposed to reflect values of solidarity and disinterestedness, but some countries nevertheless reward blood, sperm or egg donors. The existence of a worldwide black market for organs reflects the dramatic corruption of these models, but the case of couples encouraged to trade embryos in exchange for IVF treatment is an example of the minor deviations that they are willing to accept. Another area of concern is related to attempts by some biotech firms to patent gene sequences. (Cassier 2002) A highly controversial case concerned the license given in 1998 by Iceland to a genetics company, deCODE, to construct and commercialize a genomic biobank collecting data from the entire Icelandic population. (Pálsson 2007) Sociologists have proposed concepts of biocapital or biovalue to account for the specific value and exchange circuits that are built around these entities. (Rose 2007; Waldby and Mitchell 2006)

Finally, the development of genetic counseling and birth control over the last three decades has raised concerns about the reemergence of eugenics in European countries, a reminder of policies developed at the beginning of 20<sup>th</sup> century. Of course, these practices no longer reflect coercive policies applied by state authorities as did the sterilization programs implemented in Northern countries until the 1970s. Sociologists have argued that they nevertheless constitute a form of biopolitical government, which relies on endowing individuals with the responsibility of managing their reproduction and is supported by the development of screening technologies and health promotion strategies, as well as by private industry interests. (Rose 2007) One of the determining features of this biopolitics is that it takes place in a world that is no longer that of the nation, thus testifying to the growing significance of analyses at the global level.

## **Conclusion**

Over the last fifty years, medicine, health and illness have become important issues for sociological analysis throughout Europe, and sociology has contributed in important ways to the development of health as a public concern in European countries. In this paper, we have outlined the development of European medical sociology from its emergence in the post war period, tracing the changing configuration of practical concerns and theoretical commitments that have shaped research in the field. We have argued that while medical sociology emerged

locally from an involvement of scholars in health policy issues, over the last thirty years it has developed into analyses that are both more theoretically informed and more cosmopolitan. We have also shown how this evolution is reflected in the ways medical sociologists have developed some of their research themes. While medical sociology remains rooted within enduring and divergent national traditions, we hope to have shown some of the ways in which its development has now led to the emergence of a new framework for research conducted both at the local and the European level – a framework that may lay the groundwork for a truly European medical sociology.

## References

- Agamben, Giorgio. 1995. *Homo sacer*. Torino: G. Einaudi.
- Aïach, Pierre, and Didier Fassin. 1994. *Les métiers de la santé : enjeux de pouvoir et quête de légitimité*. Paris: Anthropos : Diffusion Economica,.
- Annandale, Ellen, and David Field. 2009. "Medical Sociology in Great Britain." Pp. 246-62 in *The Blackwell Companion to Medical Sociology*, edited by William C. Cockerham. Malden MA and Oxford UK: Blackwell Publishers.
- Armstrong, David. 1990. "Use of the genealogical method in the exploration of chronic illness: a research note." *Social Science and Medicine* 30(11):1225-27.
- . 1998. "Decline of the hospital: reconstructing institutional dangers." *Sociology of Health and Illness* 20(4):445.
- Atkinson, Paul. 1981. *The clinical experience : the construction and reconstruction of medical reality*. Westmead: Gower.
- . 1995. *Medical talk and medical work : the liturgy of the clinic*. London: Sage.
- Barnes, Barry, and Steven Shapin. 1979. *Natural order : historical studies of scientific culture*. Beverly Hills, Calif.: Sage Publications.
- Barral, C., F. Patterson, Henri-Jacques Stiker, and Michel Chauvière (Eds.). 2000. *L'institution du handicap. Le rôle des associations*. Rennes: Presses Universitaires de Rennes.
- Bastide, Roger. 1950. *Sociologie et psychanalyse*. Paris: PUF.
- Baszanger, Isabelle. 1985. "Professional socialization and social control: From medical students to general practitioners." *Social Science & Medicine* 20(2):133.
- . 1986. "Les maladies chroniques et leur ordre négocié." *Revue Française de Sociologie* 27:3-27.
- . 1995. *Douleur et médecine, la fin d'un oubli*. Paris: Le Seuil.
- Beck, Ulrich. 1986. *Risikogesellschaft : auf dem Weg in eine andere Moderne*. Frankfurt am Main: Suhrkamp.
- Beck, Ulrich, and Edgar Grande. 2007. *Cosmopolitan Europe*: Polity.
- Berg, M. 1992. "The construction of medical disposals Medical sociology and medical problem solving in clinical practice." *Sociology of Health & Illness* 14(2):151–80.
- Blaxter, Mildred. 1990. *Health and lifestyles*. London ; New York: Routledge.
- Bloom, Samuel W. 2002. *The word as scalpel. A history of medical sociology*. New York: Oxford University Press.
- Blume, Stuart. 1992. *Insight and industry: on the dynamics of technical change in medicine*. Cambridge, MA: MIT Press.
- Boltanski, Luc. 1971. "Les usages sociaux du corps." *Annales E.S.C.* 26(1):205-33.

- Bolton, Sharon C. 2000. "Who cares? Offering emotion work as a 'gift' in the nursing labour process." *Journal of Advanced Nursing* 32(3):580-86.
- Bourret, P., A. Mogoutov, C. Julian-Reynier, and A. Cambrosio. 2006. "A New Clinical Collective for French Cancer Genetics." *Science, technology & human values* 31(4):431-64.
- Bury, Michael. 1982. "Chronic illness as biographical disruption." *Sociology of Health and Illness* IV(2):167-82.
- . 1986. "Social constructionism and the development of medical sociology." *Sociology of Health and Illness* 8:137-69.
- . 1991. "The sociology of chronic illness: a review of research and prospects." *Sociology of Health and Illness* (13):451-68.
- Callon, Michel, Pierre Lascoumes, and Yannick Barthe. 2001. *Agir dans un monde incertain : essai sur la démocratie technique*. Paris: Seuil.
- Casper, Monica J., and Marc Berg. 1995. "Introduction." *Science, Technology and Human Value* 20(4 Special Issue: Constructivist perspectives on medical work: Medical practices and science and technology studies):395-407.
- Cassier, Maurice. 2002. "Private property, collective property, and public property in the age of genomics." *International Social Science Journal* 54(171):83-98.
- Clarke, Adele, Jennifer Ruth Fosket, Jennifer R. Fishman, Laura Mamo, and Janet K. Shim (Eds.). 2010. *Biomedicalization : technoscience, health, and illness in the U.S.* Durham, NC: Duke University Press.
- Clarke, Adele, Laura Mamo, Jennifer R. Fishman, Janet K. Shim, and Jennifer Ruth Fosket. 2003. "Biomedicalization: Technoscientific Transformations of Health, Illness, and U.S. Biomedicine " *American Sociological Review* 68(2):161-94.
- Clarke, Juane N. 1983. "Sexism, feminism and medicalism: a decade review of literature on gender and illness." *Sociology of Health & Illness* 5(1):62-82.
- Claus, Lisbeth M. 1982. *The growth of a sociological discipline: on the development of medical sociology in Europe*. Leuven: Sociological Research Institute.
- Cockerham, William C. 2000. "Medical Sociology at the Millenium." Pp. 420-42 in *The International Handbook of Sociology*, edited by Stella R. Quah and Arnaud Sales. London, Thaousand Oaks, New Delhi: Sage Publications.
- Cornwell, Jocelyn. 1984. *Hard-earned lives : accounts of health and illness from East London*. London ; New York: Tavistock Publications ; Methuen.
- Crossley, Nick. 2006. *Contesting psychiatry : social movements in mental health*. Abingdon, Oxfordshire ; New York, NY: Routledge.
- Davies, Celia. 2003. "Some of our concepts are missing: reflections on the absence of a sociology of organisations in *Sociology of Health and Illness*." *Sociology of Health and Illness* 25(Silver Anniversary Issue):172-90.
- Delanty, Gerard, and Chris Rumford. 2005. *Rethinking Europe : social theory and the implications of europeanization*. London ; New York: Routledge.
- Dingwall, R., and T. Murray. 1983. "Categorization in accident departments: 'good' patients, 'bad' patients and 'children'." *Sociology of Health & Illness* 5(2):127-48.
- Featherstone, Mike, Mike Hepworth, and Bryan S. Turner (Eds.). 1991. *The Body : social process and cultural theory*. London: SAGE Publications.
- Felt, Ulrike, and Brian Wynne. 2007. *Taking European Knowledge Society Seriously*. Luxembourg: Directorate General for Research Science, Economy and Society.
- Foucault, Michel. 1975. *Surveiller et punir. Naissance de la prison*. Paris: Gallimard.
- Fox, Renée C. 1989. *The sociology of medicine. A participant observer's view*. Englewood Cliffs: Prentice Hall.

- Franklin, Sarah. 2006. "Embryonic Economies: The Double Reproductive Value of Stem Cells." *BioSocieties* 1(1):71-90.
- Freidson, E. 1983. "Viewpoint: sociology and medicine: a polemic." *Sociology of Health & Illness* 5(2):208-19.
- Freidson, Eliot. 1970. *Profession of medicine. A study of the sociology of applied knowledge*. New York,: Dodd, Mead.
- Gabe, Jonathan, and Michael Calnan. 2009. *The New Sociology of the Health Service*. London; New York: Routledge.
- Gerhardt, Uta. 1986. *Patientenkarrieren : eine medizinsoziologische Studie*. Frankfurt am Main: Suhrkamp.
- Gerlinger, Thomas. 2006. "Historische Entwicklung und theoretische Perspektiven der Gesundheitssoziologie." in *Soziologie der Gesundheit*, edited by Claus Wendt and Christof Wolf. Wiesbaden: VS Verlag für Sozialwissenschaft.
- Giddens, Anthony. 1991. *Modernity and self identity: Self and society in the late modern age*. Cambridge: Cambridge University Press.
- Gottweis, H., and A. R. Petersen. 2008. *Biobanks: Governance in comparative perspective*: Taylor & Francis.
- Halper, Thomas. 1989. *The misfortunes of others: end-stage renal disease in the United Kingdom*. Cambridge; New York: Cambridge Univ Press.
- Hedgecoe, Adam. 2004. *The politics of personalised medicine : pharmacogenetics in the clinic*. New York: Cambridge University Press.
- Henkes, Nicolas. 2011. "Reshaping chronicity. Neuroleptics and the changing meaning of therapy in French psychiatry, 1950-1975." *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences* 42(4):434-42.
- Herzlich, Claudine. 1969. *Santé et maladie, analyse d'une représentation sociale*. Paris, La Haye: Mouton.
- Hogle, Linda F. 1999. *Recovering the Nation's Body: Cultural Memory, Medicine, and the Politics of Redemption*. New Brunswick, NJ: Rutgers University Press.
- Horobin, Gordon. 1985. "Medical sociology in Britain: True Confession of an Empiricist." *Sociology of Health and Illness* 7(1):94-107.
- Hunter, David J. 1979. "Coping with uncertainty: decisions and resources within health authorities." *Sociology of Health & Illness* 1(1):40-68.
- Illsley, Raymond. 1975. "Promotion to observer status." *Social Science & Medicine* (1967) 9(2):63-67.
- James, Nicky. 1992. "Care = organisation + physical labour + emotional labour." *Sociology of Health and Illness* 14(4):488-509.
- Jeffrey, Roger. 1979. "Normal rubbish: deviant patients in casualty departments." *Sociology of Health & Illness* 1(1):90-107.
- Johnson, Terence J., Gerry Larkin, and Mike Saks (Eds.). 1995. *Health professions and the state in Europe*. Londres: Routledge.
- Kline, Wendy. 2010. *Bodies of knowledge : sexuality, reproduction, and women's health in the second wave*. Chicago ; London: The University of Chicago Press.
- Kuhlmann, Ellen. 2006. *Modernising health care : reinventing professions, the state and the public*. Bristol, U.K.: Policy Press.
- Kuty, Olgierd. 1994. *Innover à l'hôpital : analyse sociologique d'une unité de dialyse rénale*. Paris: L'Harmattan.
- Larkin, G. V. 1980. "Professionalism, Dentistry and Public Health." *Social Science & Medicine* 14:223-29.

- Lascoumes, Pierre, and Patrick Le Galès (Eds.). 2004. *Gouverner par les instruments*. Paris: Presses de Sciences Po.
- Light, Donald W., and David Hughes. 2001. "Introduction: A sociological perspective on rationing: power, rhetoric and situated practices." *Sociology of Health and Illness* 23(5):551-69.
- Löwy, Ilana, and Jean-Paul Gaudillière. 2008. "Localizing the Global." *Science, technology & human values* 33(3):299.
- Lüschen, Günther, and al. 1996. *Health Systems in the European Union: Diversity, Convergence and Integration*. Munich: Oldenbourg.
- Mackenbach, J. P. 2006. *Health inequalities: Europe in profile*: Produced by COI for the Department of Health.
- Mechanic, David, and Edmund H. Volkart. 1961. "Stress, illness behavior, and the sick role." *American Sociological Review* 26(1):51-58.
- Nancarrow, Susan A., and Alan M. Borthwick. 2005. "Dynamic professional boundaries in the healthcare workforce." *Sociology of Health and Illness* 27(7):897-919.
- Nettleton, Sarah. 1992. *Power, Pain and Dentistry*. Buckingham: Open University Press.
- Novas, Carlos. 2006. "The Political Economy of Hope: Patients' Organizations, Science and Biovalue." *BioSocieties* 1(03):289.
- Oakley, Ann. 1984. *The captured womb : a history of the medical care of pregnant women*. Oxford Oxfordshire ; New York, N.Y.: B. Blackwell.
- Ostrowska, A. 1996. "The development of medical sociology in Eastern Europe, 1965-1990." *European Journal of Public Health* 6:100-04.
- Pálsson, Gísli. 2007. *Anthropology and the new genetics*. Cambridge: Cambridge University Press.
- Petryna, Adriana. 2002. *Life exposed : biological citizens after Chernobyl*. Princeton, N.J.: Princeton University Press.
- Prior, Lindsay. 2003. "Belief, knowledge and expertise: the emergence of the lay expert in medical sociology." *Sociology of Health & Illness* 25(3):41-57.
- Rabeharisoa, Vololona, and Michel Callon. 1999. *Le pouvoir des malades. L'association française contre les myopathies et la recherche*. Paris: Presses de l'École des Mines.
- Radley, Alan. 1989. "Style, discourse and constraint in adjustment to chronic illness." *Sociology of Health & Illness* 11(3):230-52.
- Romestaing, Patrick, and Gwénaëlle Le Breton-Lerouillois. 2011. *Atlas de la démographie médicale en France. Situation au 1er janvier 2011*. Paris: Conseil National de l'Ordre des Médecins.
- Rose, Nikolas S. 2001. "The Politics of Life Itself." *Theory Culture Society* 18(6):1-30.
- . 2007. *The politics of Life Itself : Biomedicine, Power, and Subjectivity in the Twenty-First Century*. Princeton, NJ: Princeton University Press.
- Saake, Irmhild, and Werner Vogd (Eds.). 2008. *Moderne Mythen der Medizin. Studien zur organisierten Krankenbehandlung*. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Scambler, Graham. 2012. "Health inequalities." *Sociology of Health & Illness* 34(1):130-46.
- Scambler, Graham, and Anthony Hopkins. 1986. "Being epileptic: coming to terms with stigma." *Sociology of Health & Illness* 8(1):26-43.
- Staub, Michael E. 2011. *Madness is civilization : when the diagnosis was social, 1948 -1980*. Chicago: University of Chicago Press.
- Steffen, Monica (Ed.). 2005. *Health Governance in Europe. Issues, challenges and theories*. London and New York: Routledge.
- Tallacchini, M. 2009. "Governing by values. EU ethics: soft tool, hard effects." *Minerva* 47(3):281-306.

- Timmermans, Stefan, and Marc Berg. 2003a. *The gold standard : the challenge of evidence-based medicine and standardization in health care*. Philadelphia, Pa.: Temple University Press.
- . 2003b. "The practice of medical technology." *Sociology of Health & Illness* 25(3):97-114.
- Turner, Bryan. 2004. *The new medical sociology : social forms of health and illness*. New York: W.W. Norton.
- Von Dem Knesebeck, O., and Johannes Siegrist. 2009. "Medical sociology in Germany." Pp. 287-97 in *The Blackwell Companion to Medical Sociology*, edited by William C. Cockerham. Malden MA & Oxford: Blackwell Publishers.
- Waldby, C., and R. Mitchell. 2006. *Tissue economies: Blood, organs, and cell lines in late capitalism*: Duke University Press Books.
- Weisz, George. 2006. *Divide and conquer. A comparative history of medical specialization*. Oxford: Oxford University Press.
- Williams, Gareth. 1984. "The genesis of chronic illness: narrative reconstruction." *Sociology of Health & Illness* 6(2):175-200.
- Young, J. T. 2004. "Illness behaviour: a selective review and synthesis." *Sociology of Health & Illness* 26(1):1-31.
- Zola, Irvin K. 1966. "Culture and Symptoms. An analysis of patients' presenting complaints." *American Sociological Review* XXXI:615-30.